## ISSUE SI IP STAPLE AREA (for additional cross references)

| POSITION                                   | INITIALS | ID NO.        | DATE       |  |  |  |  |
|--|----------|---------------|------------|--|--|--|--|
| FEE DETERMINATION                          | E, H     |               | 04-13-01   |  |  |  |  |
| O.I.P.E. CLASSIFIER                        | mw       | (7)           | 05-11-01   |  |  |  |  |
| FORMALITY REVIEW RESPONSE FORMALITY REVIEW | 5000V    | (8000)<br>947 | 08/39/01   |  |  |  |  |
| RESPONSE FORMALITY REVIEW                  | 12       |               | 0 8103 101 |  |  |  |  |

## INDEX OF CLAIMS

|   | Rejected                   | N | Non-elected  |
|---|----------------------------|---|--------------|
| • | Allowed                    | ï | Interference |
| = | Allowed                    |   | Appeal       |
| _ | (Through numeral) Canceled | A | Objected     |
| ÷ | Restricted                 | 0 | Objected     |

|            |                                       |          |   |           |   |              |    |   |           | ÷  |   | •••    | ••• | ••••     | •• | ••••     | •••      | ••• |            | • |
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| ü          |                                       | 3        | ļ | <i>.</i>  | L | _            | L  | _ | L         |    | L | 4      | H   | 4        | _  | +        | _        | ╀   | ᅱ          |   |
| _          | [1]                                   | Ľ        |   | _         | L | _            | L  | _ | L         | _  | Ł |        | Ļ   | -        | _  | +        |          | ╀   | $\dashv$   |   |
|            | 3                                     | 4        | ŀ |           | ŀ |              | ŀ  |   | H         | _  | ╀ | -      | ┞   | ᅱ        | _  | +        | _        | ╀   | ⊣          |   |
| _          | ـــــــــــــــــــــــــــــــــــــ | Ļ.       | ļ | _         | ŀ | _            | ŀ  |   | ŀ         | _  | ╀ | _      | H   | -        | _  | +        | _        | ╀   | $\dashv$   |   |
| -          | 5                                     | ۲        | ł | <u></u>   | H | -            | ŀ  | _ | H         | _  | t | -      | t   | -        | H  | +        |          | t   |            |   |
| ┝          | 6                                     | 17       | ť | _         | t |              | 1  |   | t         | _  | t | _      | t   |          | Г  | 1        | _        | t   | ┪          |   |
| 1          | 7                                     | ٦,       | 1 | <u>-</u>  | t | _            | t  |   | t         | _  | t |        | T   |          | Г  | 7        | _        | T   | $\exists$  |   |
| _          | 8                                     | ī        | 1 | <u> </u>  | İ |              | T  |   | Ī         |    | 1 |        | Ī   |          |    | _        |          | Ι   |            |   |
|            | 9                                     | L,       | Z | ,         | I |              | I  | _ | I         |    | l | _      | L   |          | L  | _        |          | 1   | _          |   |
|            | 10                                    | 1        | 1 |           | ļ | _            | ļ  | _ | L         |    | 1 | _      | ļ   |          | L  | 4        |          | 1   | _          |   |
| L          | 11                                    | 1        | 1 |           | 1 |              | ļ  |   | ļ         |    | 4 |        | ŀ   | _        | L  | 4        |          | 1   | 4          |   |
| _          | 12                                    |          | 4 | _         | + |              | +  |   | ł         | _  | + | _      | +   |          | H  | 4        |          | +   | -          | i |
| $\vdash$   | 13                                    | -        | + |           | 7 | _            | +  | _ | +         |    | + | _      | ł   | _        | H  | $\dashv$ | _        | +   | -          |   |
| $\vdash$   | 15                                    | -        | + |           | + | _            | t  | _ | $\dagger$ |    | + | -      | t   | _        | t  | +        | _        | †   |            |   |
| 1          | 16                                    |          | + |           | † |              | t  | _ | t         | -  | † | _      | t   |          | t  | 7        |          | †   |            | l |
| F          | 17                                    | _        | 1 | _         | 1 | _            | †  |   | t         | _  | 1 | _      | 1   |          | Ι  |          |          |     |            |   |
|            | 18                                    |          | 1 |           | 1 |              | 1  |   | 1         |    | 1 |        | I   |          | I  |          |          | I   |            | l |
| Γ          | 19                                    | •        |   |           |   |              | I  |   |           |    |   |        |     |          | I  |          |          |     |            | l |
| Γ          | 20                                    | ٦        |   |           | 1 |              | Į  |   |           |    |   |        | 1   |          | L  |          |          | 1   | _          | l |
|            | . 2                                   | ī        | 1 | 1         | - |              |    |   | -         | -  |   | _      | 1   | _        | 1  | _        | L        | 1   | _          | ١ |
|            | 22                                    |          |   | Ŀ         |   |              |    | - | 1         | _  | ٠ | _      | 1   | _        | 1  |          | L        | _   | <u>.</u> . | ł |
| L          | 2                                     |          |   | L         |   |              | 4  | • | 4         | _  | _ |        | 4   | _        | 1  | _        | L        | 4   | _          | ł |
| L          | 2                                     |          | _ | L         | _ | -            | 4  | _ | 4         | _  | _ | H      | 4   | _        | +  |          | ┞        | 4   |            | 1 |
| Ŀ          | 2                                     |          | _ | ┞         | _ | -            |    |   | -         | _  | _ | H      | -   | _        | +  |          | ╁        | -   | _          | 1 |
| $\vdash$   | 2                                     |          | - | ŀ٠        |   | ┝            | -  | H |           |    | - | -      |     | H        | +  | _        | t        | _   |            | 1 |
| <u> </u> - | 2                                     |          |   | H         | _ | r            |    | - |           | Ė  | Ė | Ė      | -   | r        | 1  |          | t        | _   | Г          | ١ |
| ┢          | 2                                     |          |   | t         | _ | T            |    | Γ |           | Г  | _ | ı      |     | Γ        | 1  |          | T        |     |            |   |
| ۲          | 3                                     | 0        | _ | T         | _ |              |    |   |           |    |   | L      |     |          |    |          | Ι        |     |            |   |
|            | 3                                     | 11       |   |           | _ |              |    |   |           |    |   | L      | _   |          |    | _        | 1        |     | L          |   |
|            |                                       | 2        |   | Ĺ         | _ | L            |    | L |           | L  |   | 1      |     | L        | 4  | _        | 1        | _   | L          |   |
|            | _                                     | 3        | _ | L         | _ | ╀            |    | L | _         | L  |   | 1      | _   | $\vdash$ | 4  | _        | +        | _   | L          | _ |
| L          |                                       | 4        |   | 1         |   | 1            | _  | H | _         | 1  |   | ╀      |     | $\vdash$ | _  | H        | +        |     | $\vdash$   |   |
| -          |                                       | 15       | - | +         | _ | ╀            |    | + |           | ╀  | _ | +      | -   | +        |    | $\vdash$ | +        |     | H          |   |
| $\vdash$   |                                       | 37       | - | +         | _ | $\dagger$    | -  | t | -         | +  |   | +      | -   | ۲        | _  | ┢        | +        |     | t          | - |
| H          |                                       | 8        | _ | $\dagger$ |   | $^{\dagger}$ |    | t | -         | t  |   | t      | -   | t        | -  | r        | 1        |     | T          | _ |
| t          | 1                                     | 39       |   | †         | _ | t            | _  | t | _         | T  |   | T      |     | T        | _  |          | 1        | _   | Γ          | _ |
| T          | _                                     | 10       |   | †         |   | T            |    | T |           | T  |   | T      | _   | Γ        |    |          | T        |     | Ι          |   |
| T          | 1                                     | 41       |   | †         |   | Ť            |    | T |           | T  | _ | T      | _   | I        |    |          |          |     | Ι          |   |
| ۲          | _                                     | 12       | _ | 1         | _ | İ            | _  | Ī | _         | I  | _ | I      |     | I        | _  |          |          |     | I          |   |
|            |                                       | 43       | _ | I         | _ | I            |    | I |           | I  |   | I      | _   | I        |    | L        | 1        |     | L          |   |
|            |                                       | 44       | _ | 1         | _ | 1            | _  | 4 |           | 1  | _ | 1      |     | 1        | _  | L        | 4        |     | 1          |   |
| -          | _                                     | 45       | _ | 4         |   | 4            | ٠, | 1 | _         | 1  |   | +      | _   | 1        | _  | $\vdash$ | 4        |     | +          | _ |
| -          | _                                     | 46       |   | 4         | _ | 4            | ļ  | + |           | 4  | _ | +      |     | +        | _  | ╀        | 4        |     | +          |   |
| -          | _                                     | 47<br>48 | _ | 4         | _ | +            | _  | + |           | +  |   | +      | _   | +        | _  | ╀        | 4        |     | +          | _ |
| - }        |                                       | 48<br>49 |   | +         | _ | +            | -  | + | _         | +  | _ | +      | -   | +        |    | t        | $\dashv$ |     | +          |   |
| }          |                                       | 50       | _ | +         |   | +            |    | + |           | +  | - | $^{+}$ | -   | +        |    | t        | $\dashv$ | _   | $\dagger$  | - |
|            |                                       |          |   |           |   |              |    |   |           |    |   |        |     |          |    |          |          |     |            |   |

| Cla            | im       |               |   |   | _ |           | D      | at | е | _        |    | _        |          | _            |              |   |
|----------------|----------|---------------|---|---|---|-----------|--------|----|---|----------|----|----------|----------|--------------|--------------|---|
|                | 펼        |               |   |   | ١ |           |        |    |   | ١        |    | l        |          | -            | -            |   |
| Final          | Original | 1             |   |   |   |           |        |    |   | ١        |    | ۱        |          |              |              |   |
| =              | 51       | †             | ٦ | Г | † | _         | T      |    | Г | 1        |    | T        |          |              |              |   |
|                | 52       | T             |   |   | T |           | Γ      |    |   |          |    | I        |          |              | $\square$    |   |
|                | 53       | Τ             |   |   | I |           |        |    |   |          | _  | 1        |          |              | Ш            | i |
|                | 54       | Ţ             | _ |   | 1 |           | Ļ      | _  | Ļ | 4        | _  | 4        |          | _            | Н            |   |
| _              | 55       | 4             |   | L | 4 |           | 1      | _  | L | 4        | _  | 4        | $\dashv$ | _            | H            | ١ |
|                | 56       | +             | _ | - | 4 | _         | ╀      | _  | H | $\dashv$ | _  | +        | -        | _            |              |   |
| <del>  -</del> | 57<br>58 | ╁             | _ | ├ | + | _         | ╁      |    | ┝ | -        | _  | +        | ᅥ        | _            | $\vdash$     |   |
| -              | 59       | +             | _ | ╁ | + | _         | t      |    | H | -        | Н  | 1        | $\dashv$ |              | H            | ١ |
| ⊢              | 60       | +             | - | H | 7 | _         | †      |    | T |          | Г  | 1        |          |              |              | ١ |
|                | 61       | †             | _ | T | 7 |           | T      |    | T |          |    | 1        |          |              |              | 1 |
|                | 62       | $\Box$        | _ |   |   |           | Ι      |    | I |          |    |          |          |              | L            |   |
|                | 63       | $\Box$        | _ |   |   |           | 1      | _  | L | _        | L  | 4        |          | L            | L-           | ļ |
| L              | 64       | 4             |   | L | _ | L         | 4      | _  | ļ | _        | L  | 4        |          | ļ            | ├-           | 1 |
| <u> </u>       | 65       | 4             | _ | ╀ | 4 | H         | 4      |    | ╀ |          | -  | 4        |          | ┝            | ├-           | ł |
| <u> </u>       | 66<br>67 | -             |   | ╀ | - | L         | +      |    | ╁ |          | ┝  | $\dashv$ | _        | H            | ⊢            | 1 |
| ┝              | 68       | ┪             |   | ╁ | _ | H         | +      |    | + | -        | H  | +        | _        | Н            | ✝            | 1 |
| $\vdash$       | 69       | +             | _ | t | _ | ┢         | †      | _  | t |          | T  | ┪        | _        | T            | ١.           | 1 |
|                | 70       | ┪             | _ | t |   | T         | †      | _  | t | _        | T  |          |          | Γ            | Τ            | 1 |
| -              | 71       | ┪             | _ | t |   | H         | +      | _  | t | _        | 1. | 7        | -        | -            | 1            | 1 |
| F              | 72       | ┪             |   | † | - | F         | 1      |    | 1 |          | Ī  | =        | i        | Ξ.           |              | 1 |
|                | 73       | •             |   | 1 | _ | Γ         |        | _  | I |          | I  |          |          | Ŀ            | L            | 1 |
|                | 74       |               |   | I | _ | I         | $\Box$ | _  | 1 |          |    |          | L        | ╄            | $\downarrow$ | 4 |
| <u>_</u>       | 75       |               | L | 1 |   | Ļ         | 4      |    | 4 | _        | 1  |          | L        | ╀            | +            | 4 |
| -              | 76       |               | L | 4 |   | ╀         | 4      | _  | 4 | _        | +  | _        | -        | ╀            | +            | + |
| $\vdash$       | 77<br>78 |               | L | + |   | +         | 4      | H  | + | _        | +  | _        | ├        | ╁            | ╁            | - |
| $\vdash$       | 79       | _             | - | + |   | +         | _      | H  | + | _        | +  | ÷        | H        | +            | ╈            | _ |
| $\vdash$       | 80       | _             | ┝ | † | - | †         | -      | H  | 7 | _        | †  | _        | T        | +            | t            |   |
| $\vdash$       | 81       | $\overline{}$ | T | † | _ | †         | _      | t  | 1 |          | 1  |          | Τ        | T            |              |   |
| $\vdash$       | 82       |               | T | 7 |   | T         |        |    |   |          | I  | _        |          | I            |              |   |
|                | 83       |               | Γ |   |   | I         |        |    |   |          | 1  |          | 1        | 1            | 1            |   |
|                | 84       |               | 1 | _ |   | ļ         | _      | L  |   | L        | 4  |          | Ļ        | 4-           | 4            | _ |
| $\vdash$       | 85       | ļ.,           | ╀ | 4 | _ | +         | _      | ╀  | _ | L        | +  | _        | ╀        | +            | ╁            |   |
| $\vdash$       | 86<br>87 | -             | ╀ | 4 | _ | +         | _      | ╀  | _ | H        | +  | _        | ╀        | +            | +            |   |
| $\vdash$       | 88       | ┝             | ╁ | - | _ | +         | _      | t  | _ | ┝        | +  | _        | ╁        | $^{+}$       | 十            | _ |
| -              | 89       | ┝             | t | ۲ | _ | $\dagger$ | _      | t  | _ | t        | 7  |          | ╁        | Ť            | +            |   |
| H              | 90       | +             | t | _ | r | 1         | _      | t  | _ | T        | _  | _        | T        | T            | T            |   |
| F              | 91       | T             | t | _ | r | 7         | _      | t  |   | Ī        |    |          | 1        | T            | T            |   |
| r              | 92       | T             | t | _ | Γ | 7         | _      | Ť  |   |          |    |          |          |              |              |   |
| t              | 93       |               | I |   |   |           |        | I  |   |          |    |          | T        | Ţ            | $\perp$      | _ |
|                | 94       | _             | Ι |   |   | $\Box$    |        | Ţ  |   | L        |    | L        | 1        | $\downarrow$ | 4            |   |
| ſ              | 95       | +-            | 1 |   | L | 4         | _      | 1  |   | 1        | _  | L        | 4        | 4            | +            |   |
| L              | 96       | -             | 4 | _ | 1 | 4         |        | +  |   | +        | _  | L        | +        | 4            | +            | _ |
| -              | 97       |               | + |   | + | -         | _      | +  | _ | +        | _  | $\vdash$ | +        | +            | +            | _ |
| ŀ              | 99       |               | + | _ | ╀ | Ⅎ         | _      | ╁  |   | +        |    | ┝        | +        | +            | $\dashv$     |   |
| ŀ              | 10       | -             | + | _ | t | $\dashv$  | -      | +  | - | t        | _  | t        | +        | +            | 寸            | _ |

|       |          | •        |    |   |          |     |          |          |                |    |   |   |   |   |      |   |   |                |    |
|-------|----------|----------|----|---|----------|-----|----------|----------|----------------|----|---|---|---|---|------|---|---|----------------|----|
| Cla   | im       | Г        | _  |   | _        |     | _        | -        | D <sub>a</sub> | te |   |   |   |   |      |   |   | $\Box$         |    |
| Final | Original |          |    |   |          |     |          |          |                |    |   |   |   |   |      |   |   | 1              |    |
| Ē     |          | L        | 4  | _ | 1        | _   | 1        | +        |                | +  | _ | ŀ |   | - | +    |   | ┝ | $\dashv$       |    |
| _     | 101      |          | +  | _ | +        | _   | ł        | +        |                | ╀  | _ | ł | _ | ┝ | +    |   | H | 긕              |    |
| _     | 102      |          | +  | - | +        | _   | ╀        | $\dashv$ | -              | +  | - | t | - | ۲ | ┪    | - | t | $\dashv$       |    |
| _     | 104      |          | +  |   | +        | _   | ł        | +        |                | +  |   | ł | _ | H | +    | - | t | ᅱ              |    |
|       | 105      |          | 7  | _ | †        | _   | t        | 1        | _              | t  | _ | t |   | Г | 7    |   | T | ヿ              |    |
|       | 106      |          | 1  |   | †        | _   | t        | ┪        | _              | 1  |   | Ť |   | Γ | 7    |   | T | ٦              |    |
|       | 107      |          | 1  | _ | 1        |     | Ť        |          |                | 1  |   | Ī |   |   |      |   | Ι |                |    |
| _     | 108      | L        |    | _ | I        |     | I        |          |                | I  |   | I |   | L | _    | _ | 1 | _              |    |
|       | 109      |          |    | _ | 1        |     | 1        | _        | _              | 1  | _ | 1 |   | L | 4    | _ | 1 | 4              |    |
|       | 110      |          |    |   | 4        |     | 1        | _        |                | 4  | _ | 4 | _ | L | 4    | _ | + | 4              |    |
| _     | 11       |          | 4  | _ | 4        |     | 4        | _        |                | 4  | _ | + | _ | ╀ | 4    | • | 4 | -              |    |
|       | 112      |          | 4  | _ | 4        | _   | +        |          | _              | 4  | _ | + |   | ╀ | 4    | - | + | $\dashv$       |    |
| _     | 113      | -        | -  | _ | +        | _   | +        | -        | H              | +  |   | + | _ | ╁ | _    | - | + | $\dashv$       |    |
| _     | 114      |          | -  | _ | ┥        | _   | +        |          | _              | +  | - | + |   | ╁ |      | H | + | $\dashv$       |    |
| -     | 110      | -        | _  | - | 1        | -   | †        |          | Н              | 1  | _ | 1 |   | t | _    | T | † | _              |    |
|       | 11       |          | _  | H | 1        | _   | 1        |          | r              | 1  | _ | 1 |   | Ť |      | Г | 1 |                |    |
| _     | 11       |          |    | Г | 1        | _   | 1        |          | Г              |    |   |   |   | Ī |      |   | I |                |    |
| •     | 11       |          |    | Γ |          |     |          |          |                |    |   |   | ` |   |      |   |   |                | ]  |
|       | 12       | o        |    | Γ |          |     | ٦        |          | Γ              |    |   |   |   |   |      |   |   |                |    |
| -     | 12       | 1        | ;  | Γ |          | , i |          | 1        | Ŀ              | -  | Ŀ | _ |   |   | <br> | : |   | -:-            |    |
| Ċ     | 12       | 2        | ~  | Ŀ | '        | 1.1 |          |          | L              | _  |   | • | Ľ | 1 | _    | Ŀ | _ | =              | =  |
| L     | 12       |          | _  | Ľ |          | L   |          | -:       | ľ              | _  |   |   | - | 4 | _    | F | - | -              | 1  |
| Ľ     | 12       |          | _  | Ļ |          | L   |          | <u> </u> | ╀              | _  | ┞ | _ | L | + |      | ╀ | _ | -              | ┨. |
| L     | 12       | -        |    | ╀ | _        | ┞   | _        | ┝        | ╀              | _  | ┞ | - | ┞ | + |      | ╀ | - | H              | ┨  |
| ┝     | 12       |          | _  | ╁ |          | }   |          | ├        | ╁              | -  | ŀ |   | - | + |      | ╁ |   | ŀ              | 1  |
| H     | 12       |          | _  | ╁ |          | ╁   | ,        | ├-       | t              | -  | t | _ | ╁ | 7 |      | t | _ | <del>  -</del> | 1  |
| -     | 12       | _        | _  | t | _        | t   |          | ┪        | t              |    | t | _ | Τ | 7 |      | 1 |   | Γ              | 7  |
| -     |          | 0        | _  | t |          | T   | _        | Τ        | Ť              |    | T |   | Τ |   |      | 1 |   |                |    |
| T     |          | 31       | Г  | 1 |          | Ī   | _        | Γ        | I              |    | Ī |   | Ι |   |      | 1 |   | L              | 1  |
|       |          | 32       |    | I |          | I   |          | L        | 1              |    | 1 |   | L |   | L    | 1 | _ | L              | 1  |
|       |          | 33       |    | 1 |          | 1   | _        | Ļ        | 4              |    | 1 | _ | 1 | _ | L    | 4 | _ | 4              | 4  |
| L     | _        | 34       | -  | 4 | _        | 4   | _        | ╀        | 4              |    | + | _ | ╀ |   | L    | + |   | ╀              | -  |
| 1     |          | 35       |    | 4 | _        | 4   | _        | +        | 4              | _  | + | _ | ╫ | _ | ┝    | + | _ | +              | ┥  |
| 1     | _        | 36<br>37 | _  | + | _        | +   | _        | ╁        | +              | -  | + | - | + | _ | ┝    | + | - | 十              | ┨  |
| +     | -        | 38       | -  | + | -        | +   |          | ╁        | +              | _  | + |   | + |   | H    | 7 | _ | +              | ┪  |
| H     | -        | 39       | +- | + |          | †   |          | ╈        | 1              | _  | 1 | _ | + | _ | t    | 1 | _ | Ť              | ┨  |
| t     | -        | 40       | +- | 1 |          | 1   |          | T        | 7              |    | 1 | _ | 1 |   | T    | ٦ |   | T              | ٦  |
| t     |          | 4        |    | 7 |          | 7   |          | +        | ┪              | _  | 1 | _ | 1 | _ | T    |   | _ | T              |    |
| ŀ     |          | 4:       |    | 7 | Г        | 1   | _        | †        |                | Г  | 7 | _ | 7 |   | T    |   |   | T              |    |
| ŀ     | -        | 4:       | -  | ٦ | Г        | 7   |          | T        |                |    |   | _ |   |   | Ī    |   |   | I              |    |
| Ī     | 1        | 14       | 4  |   |          |     |          | T        |                |    |   |   |   |   | 1    |   | L | 1              |    |
|       |          | 4        |    |   | L        |     | Ĺ        | I        | _              | Ĺ  |   | Ĺ | Ţ |   | 1    | _ | L | 4              | _  |
|       |          | 4        | 6  |   | L        | 4   | L        | 4        |                | L  |   | L | 4 | _ | 1    | _ | L | 4              |    |
| -     |          | 14       |    | _ | 1        |     | L        | 4        |                | L  | _ | L | 4 | _ | +    | _ | ┞ | +              | _  |
| -     |          | 14       |    | _ | $\vdash$ | _   | H        | +        | _              | ╀  | - | 1 | - | _ | +    | _ | ╀ | +              | _  |
| -     | -        | 14<br>15 | 9  | _ | ╀        | _   | $\vdash$ | +        |                | t  | _ | H | + |   | +    | _ | t | +              | _  |
| ι     |          |          | ч_ | _ | 1_       | _   | -        |          |                | _  | _ | - |   |   |      |   |   | _              | _  |

If more than 150 claims or 10 actions staple additional sheet here

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